

15. (new) A method of making an optical glass for lenses of an optical system of an i-line stepper comprising employing an optical glass comprising, in mass %,

P₂O₅ 4 - 39%
Al₂O₃ 0 - 9%
MgO 0 - 5%
CaO 0 - 6%
SrO 0 - 9%
BaO 0 - 10%

Y₂O₃+La₂O₃+Gd₂O₃+Yb₂O₃ in the total amount of 0 - 20%

Where

Y₂O₃ 0 - 10%
La₂O₃ 0 - 10%
Gd₂O₃ 0-20%

and

Yb₂O₃ 0 - 10%
TiO₂ 0 -0.1%
SnO₂ 0 - 1%
As₂O₃ 0 - 0.5%
Sb₂O₃ 0 - 0.5%
AlF₃ 0 - 29%
MgF₂ 0 - 8%
CaF₂ 0 - 27%
SrF₂ 0 - 27%
BaF₂ 10 - 47%
YF₃ 0 - 10%
LaF₃ 0 - 10%
GdF₃ 0 - 10%
LiF 0 - 3%
NaF 0 - 1%
KF 0-1%

the total amount of F in one or more of the fluorides being 10 - 45% and the total amount of one or more of MgF₂, CaF₂, SrF₂ and BaF₂ being 30 - 70%.

REMARKS

Claim 9 has been amended to point out the lower total amount of F as being

22% which is a rounded value based on Example 50 which has 22.04% of F. New claim 15 has been added to point out the method of making an optical glass for lenses of an I-line stepper which utilizes the recited formula of ingredients.

In the Office Action of March 7, 2005, Claims 9-12 were rejected under 35 U.S.C. §102(b) as being anticipated by Komiya et al. (Komiya)

Reconsideration is requested.

The claims of the present application are denominated in "mass% of Al₂O₃" while the composition of Komiya is defined in terms of weight % of Al(PO₃), etc. This makes it impossible to directly compare the composition of Komiya with the claimed composition without conversion to mass %. For this reason, the compositions of the ingredients of the examples of Komiya have been converted to mass% on the attached tables for purposes of comparison. In this regard, it has been noted that an error was made in the previously submitted conversion chart for the Komiya patent and the attached charts correct that error.

In the glasses of the present invention, the Examiner has urged that the glasses of claims 9 and 11 of the present application are anticipated by Examples 5-12 and 15-20 of Komiya.

The MgF₂, CaF₂, SrF₂ and BaF₂ ingredients are effective for preventing devitrification of the glass and the total amount of F is 22-45 mass% as pointed out in amended claims 9-12. In contrast, the total amount of these ingredients in Examples 5 -12 and 15 - 20 of Komiya does not satisfy this range.

For these reasons, the Komiya patent fails to anticipate amended claims 9-12 and it is requested that this ground of rejection be withdrawn.

An early and favorable action is earnestly solicited.

Respectfully submitted,



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Comments or Descriptions - Material		D	R	P	O	B	I	J	K	L	M	N	O	P	Q	R
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